

CLAIMS

What is claimed is:

1. A method of detection of fraud in a claim of valuation, such as an appraisal or a mortgage application for purchase, loan, or refinance of a subject real property to be used as collateral for the mortgage, using a computer system, the method comprising the steps of:
 - 5 maintaining a database of sales prices in the computer system of a plurality of real properties in a geographic area in which the subject real property is located,
 - 10 obtaining from the computer system valuation history data for the subject property;
 - obtaining, using the computer system, historical sales data for property in the geographic area in which the subject real property is located,
 - 15 computing price ratio data using the valuation history for the subject property and the historical sales data for the subject property in the geographic area in which the subject property is located, and
 - computing a distortion index based on the price ratio data to detect fraud in the mortgage application.
2. The method as set forth in claim 1, wherein said mortgage application specifies a requested value of the subject real property and said distortion index is compared to a predetermined allowable distortion index to detect fraud in the mortgage application.
- 20 3. The method as set forth in claim 1, wherein said valuation history data is obtained by using sales data for the subject property.

4. The method as set forth in claim 1, wherein said valuation history data is obtained using an automated valuation model.
5. The method as set forth in claim 1, wherein said valuation history data is obtained by using a hybrid of automated valuation models.
- 5 6. The method as set forth in claim 1, wherein said valuation history data is obtained by using a combination of sales history data for said subject property and an automated valuation model applied to said subject property.
7. The method as set forth in claim 1, wherein said historical sales data for property in the geographic area in which the subject real property is located is based on sales of property in the ZIP code in which said subject real property is located.
- 10 15. The method as set forth in claim 1, wherein said historical sales data for property in the geographic area in which the subject real property is located is based on sales of property in the postal city or situs city in which said subject real property is located.
8. The method as set forth in claim 1, wherein said historical sales data for property in the geographic area in which the subject real property is located is based on sales of property in the county in which said subject real property is located.
- 10 20. A method as set forth in claim 1, wherein said distortion index includes a total distortion index.
11. The method as set forth in claim 11, wherein said mortgage application specifies a requested value of the subject real property and said total distortion index is compared to a predetermined allowable total distortion index to detect 25 fraud in the mortgage application

12 A method as set forth in claim 1, wherein said distortion index includes a spatial distortion index.

13. The method as set forth in claim 12, wherein said mortgage application specifies a requested value of the subject real property and said spatial
5 distortion index is compared to a predetermined allowable spatial distortion index to detect fraud in the mortgage application.

14. A method as set forth in claim 1, wherein said distortion index includes a temporal distortion index.

15. The method as set forth in claim 13, wherein said mortgage application
10 specifies a requested value of the subject real property and said temporal distortion index is compared to a predetermined allowable temporal distortion index to detect fraud in the mortgage application.

16. A method as set forth in claim 1, wherein said distortion index includes a total distortion index.

15 17. A method as set forth in claim 1, wherein said distortion index includes a spatial distortion index.

17. A method as set forth in claim 1, wherein said distortion index includes a temporal distortion index.

20 18. A method as set forth in claim 1, further including the step of reporting said price ratio data.

19. A method as set forth in claim 1, further including the step of reporting said historical sales data.

20. A method as set forth in claim 1 wherein said price ratio data is computed arithmetically by subtraction.

21. A method as set forth in claim 1 wherein said price ratio data is computed arithmetically by division.

22. A method of using a computer system to detect anomalous valuations in a real property transaction involving a subject real property, comprising the 5 steps of:

maintaining in the computer system a database of valuation-generating events for a plurality of real properties in a geographic area in which the subject real property is located,

10 for said subject property, obtaining a subject property record set including a price of said property and the date thereof for at least one valuation-generating event;

15 obtaining from the computer system a valuation history data set for said subject property, comprising prices and the dates thereof for a plurality of timepoints;

15 obtaining, using the computer system, historical sales data for property in the geographic area in which the subject real property is located,

computing price ratio data using the valuation history for the subject property and the historical sales data for the subject property in the geographic area in which the subject property is located, and

20 computing a distortion index based on the price ratio data to detect an anomalous valuation of the subject real property.